Appl. No. 10/036,308 Amendment dated October 7, 2003 Reply to Office Action of April 7, 2003

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-3. (Cancelled)

- 4. (Currently amended) A method for diagnosing and monitoring Alzheimer's disease as claimed in claim 1 comprising:
 - (a) obtaining serum blood or cerebrospinal fluid from a subject;
 - (b) detecting the amount of <u>human kallikrein 6 ("hK6")</u> in said serum <u>blood</u> or cerebrospinal fluid; and
 - (c) comparing said amount of hK6 detected to a standard an amount for healthy

 control subjects, where detection of a statistically significant increase level of hK6

 greater than that of a standard compared with an amount for the healthy control

 subjects is indicative of Alzheimer's [[D]]disease.
- 5. (Currently amended) A method for diagnosing and monitoring Alzheimer's [[D]]disease as claimed in claim [[1]] 4 comprising:
 - (a) contacting a biological sample from a subject the blood or cerebrospinal fluid with an antibody specific for hK6 which is directly or indirectly labelled with a detectable substance;
 - (b) quantifying hK6 by detecting the detectable substance to quantitate hK6 in the sample the blood or cerebrospinal fluid;
 - (c) comparing the quantitated level of hK6 to levels obtained for samples from healthy control subjects or from other samples of the subject where a statistically significant increase in the hK6 levels compared with levels for the healthy control subjects is indicative of Alzheimer's disease.

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- 6. (Currently amended) A method for the diagnosis and monitoring of Alzheimer's [[D]] disease as claimed in claim [[1]] 4 comprising
 - (a) incubating a biological sample from a subject the blood or cerebrospinal fluid with a first antibody specific for hK6 which is directly or indirectly labeled with a detectable substance, and a second antibody specific for hK6 which is immobilized;
 - (b) separating the first antibody from the second antibody to provide a first antibody phase and a second antibody phase;
 - (c) <u>quantitating hK6</u> by detecting the detectable substance in the first or second antibody phase thereby quantitating hK6 in the biological sample; and
 - (d) comparing the quantitated hK6 with quantitated levels obtained for samples from healthy control subjects or from other samples of the subject where a statistically significant increase in hK6 levels compared with levels for the healthy control subjects is indicative of Alzheimer's disease.

7-8. (Cancelled)

- 9. (Currently amended) A method as claimed in claim 6 wherein in step (a) the first and second antibodies are contacted simultaneously or sequentially with the biological sample blood or cerebrospinal fluid.
- 10. (Currently amended) A method as claimed in claim [[2]] $\underline{5}$ wherein the antibody is a monoclonal antibody, a polyclonal antibody, immunologically active antibody fragments, humanized antibody, an antibody heavy chain, an antibody light chain, a genetically engineered single chain F_v molecule, or a chimeric antibody.
- 11. (Previously presented) A method as claimed in claim 5 wherein the detectable substance is alkaline phosphatase.

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- 12. (Previously presented) A method as claimed in claim 11 wherein the alkaline phosphatase is detected using a fluorogenic substrate.
- 13. (Currently amended) A method as claimed in claim 12 wherein hK6 is measured detected using time-resolved fluorescence.